

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016573**Date Inspected:** 24-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Chen Xi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY- 1

This QA Inspector Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) buttering welding of Traveler Rail 21TR1-046. Welder is identified as 215397. ZPMC Quality Control (QC) is identified as Mr. Ai Wei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-FCAW-1G (1F)-Repair-1. The buttering was been performed as per the Critical Welding Report (CWR) No: B-CWR1568.

BAY- 2

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 06472.

Magnetic Particle Testing (MT)

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This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The members are identified as OBG Floor beam (FB) weld Components. Total number of welds MT Tested: 53 No's. The weld designations are review as follows:

1. FB3220-001-004,005,010~018,023,027,028,039,040,061~065,067~070,076,077,080,081,083,087,088,091,102,103,105,110,111,118,119,126,127,134,135.

FCAW of weld joint FB3335-001-058,059. Welder is identified as 045221. ZPMC Quality Control (QC) is identified as Mr. Zhu Jun. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

FCAW of weld joint FB3123B-001-001,002. Welder is identified as 045276. ZPMC Quality Control (QC) is identified as Mr. Zhu Jun. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

BAY- 3

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 06472.

MT

This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The members are identified as OBG FB weld Components. Total number of welds MT Tested: 60 No's. The weld designations are review as follows:

1. FB3150-001-002~004,007~009,014,015,022~029,031,037~054,061,062,079,080,115,120,125,145,146,150~155.

During QA MT review of welds located on Orthotropic Box Girder (OBG) FB – FB3150-001, this QA Inspector observed Two (2) longitudinal surface linear indications measuring approximately 10 and 12 mm in length. The welds are identified as: FB3150-001-150 and 151 respectively. The welds are a fillet welds joining to Stringer plate to FB flange. The “Y” locations are 0 from the nearest end of the welds. These indications has been ground out and MT re tested found to be acceptable. The indications are located not within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC QC personnel are required to perform 25% MT inspection of these welds. Refer the attached photos for reference.

FCAW of weld joint LD3026-001-074. Welder is identified as 055564. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2233-TC-U4b-F.

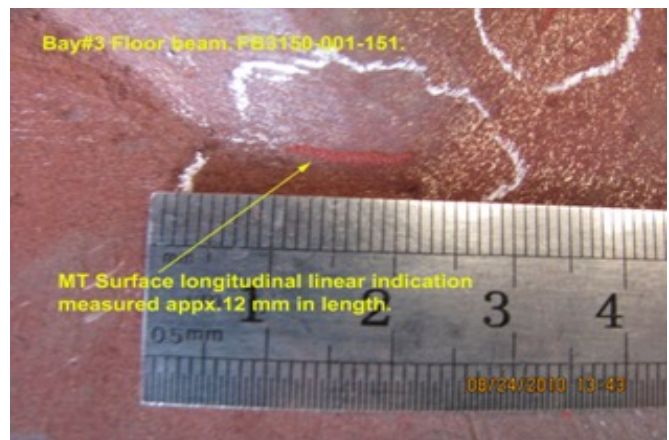
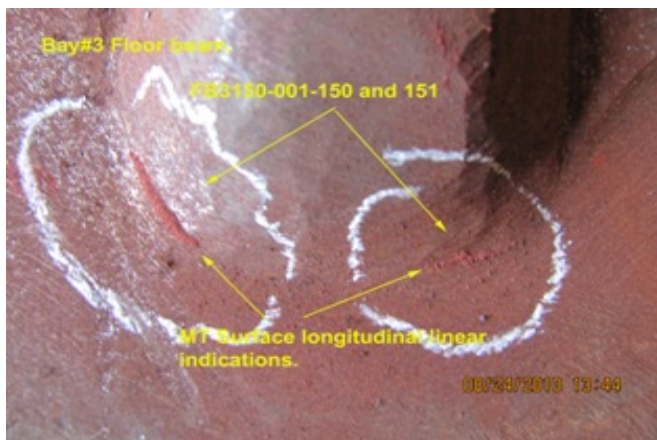
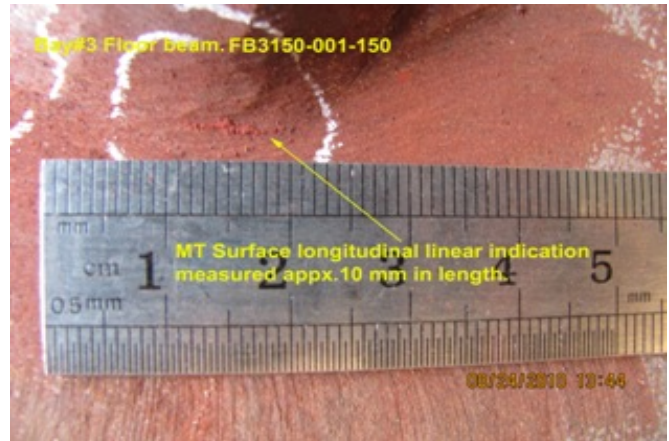
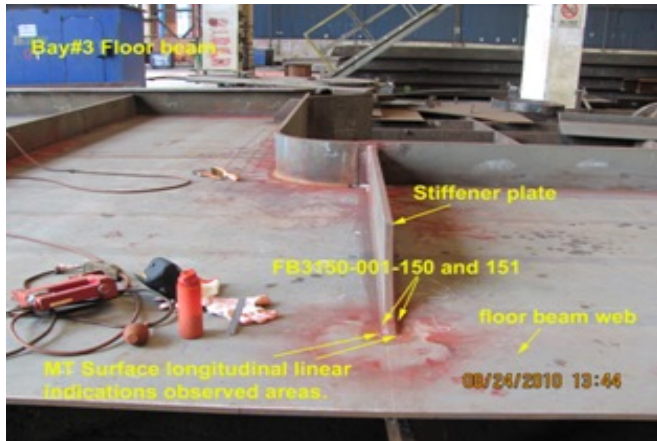
FCAW of weld joint LD3026-001-098. Welder is identified as 052696. ZPMC Quality Control (QC) is identified

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as Mr. Zhan Hai Feng. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2232-TC-U4b-F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Prabhu,Surendra

Quality Assurance Inspector

Reviewed By: Hall,Steven

QA Reviewer